

## ON SOME UNDESCRIBED REPTILES AND FISHES FROM AUSTRALIA.

By J. DOUGLAS OGILBY.

TYPHLOPS CURTUS, *sp. nov.*

Habit stout. Snout obtusely rounded, and moderately prominent; nostrils inferior. Rostral narrow, its upper portion three and two-thirds in the width of the head, extending to between the anterior margins of the eyes; nasal incompletely divided, the cleft originating above the first labial, forming a suture with the prefrontal; preocular smaller than the ocular. Eye distinct. Prefrontal very large, much larger than the supraoculars; frontal and parietals not larger than the body-scales. Four upper labials. Diameter of body twenty-four times in the total length. Tail longer than broad, ending in a strong, short, conical spine, which scarcely projects beyond the surrounding scales. Twenty-three series of scales round the middle of the body, the dorsals and laterals smooth, the abdominals conspicuously raised along the median line, with numerous faint carinations on the basal half, and with the tips free.

*Colors.*—Pale reddish-brown above, each scale broadly margined with gray; head-shields darker, chestnut-brown with a yellow margin; lower surfaces yellow.

*Dimensions.*

Total length	...	...	...	275	mm.
Head	...	...	...	7	"
Width of head...	...	...	...	7	"
Body	...	...	...	259	"
Tail	...	...	...	9	"
Breadth of tail...	...	...	...	8	"

*Habitat.*—Walsh River, Gulf of Carpentaria.

*Type.*—In the Australian Museum, presented by E. G. Braddon, Esq. Reg. No. R. 1132.

HOPLOCEPHALUS SUBOCCIPITALIS, *sp. nov.*

Body moderate. Head depressed, rather small. Eye of moderate size, its diameter rather more than half the length of the snout, with rounded pupil; supraciliary ridge but little developed. The height of the rostral is three-fourths of its breadth, its upper margin rounded, just visible from above; length of the frontonasals five-sevenths of that of the prefrontals,

which are half that of the frontal ; the latter shield hexagonal, obtusely angular anteriorly, acutely so posteriorly, the lateral margins slightly converging, one-half longer than broad ; length of the parietals equal to that of the frontals and prefrontals together ; the nasal forms a short suture with the preocular ; two subequal postoculars ; six upper labials, the third and fourth entering the eye, the first small, the others gradually increasing in size to the last ; two pairs of temporals, the lower one of the anterior pair much the largest, and partially wedged in between the two last labials. There are 17 scales round the middle of the body ; abdominal shields 163 ; two anal plates, with sometimes a third smaller plate in front ; subcaudal shields in a single series, 43 in number.

*Colors*.—Head above olive-brown, with a broad black band including the greater portion of the parietals and two series of scales behind them, and bending angularly forwards upon the posterior third of the frontal, and extending down the sides of the head to behind the last upper labial ; dorsal and lateral scales bright olive-brown, the latter tipped with black ; abdominal and subcaudal scales pale yellow ; the former with a roseate spot on the median series and a dusky spot on the postero-external angles ; the latter with faint indications of dark median spots.

*Dimensions.*

Total length	...	...	...	370 mm.
Head	...	...	...	12 "
Width of head	...	...	...	7 "
Body	...	...	...	300 "
Tail	...	...	...	58 "

*Habitat*.—Moree.

*Type*.—In the Australian Museum, presented by E. J. Ross McMaster, Esq. Reg. No. R. 1127.

CLUPEA SPRATTELLIDES, *sp. nov.*

D. 15. A. 19. V. 8. P. 16. C. 19. L. lat. 49 – 51. L. tr. 12 – 13. Vert. 48.

Length of head 5.00 – 5.15, of caudal fin 5.75 – 6.00, height of body 4.75 – 5.00 in the total length. Eye moderate, with rudimentary adipose lid, its diameter 3.00 – 3.20 in the length of the head ; snout short and obtuse, 1.10 – 1.25 in the diameter of the eye ; interorbital space slightly convex, 1.40 – 1.55 in the same. Nostrils small and approximate, situated midway between the tip of the snout and the orbit, the posterior the larger, subcircular. Upper surface of the head flat, with a strong central ridge from the snout to the occiput, which is depressed : lower jaw projecting : cleft of mouth small and very oblique, the maxilla reaching to

beneath the anterior third of the orbit. Opercles smooth; sub-opercle moderately broad, acutely rounded behind. Toothless. The distance between the origin of the dorsal and the tip of the snout is equal to or a trifle longer than that between the same point and the base of the caudal; the third ray is the longest, from 1.50–1.66 in the length of the head, and equal to the basal length of the fin; the outer margin is concave: anal low, the longest rays a little more than the diameter of the eye: *ventrals inserted entirely in front of the dorsal*, with the outer margin acutely rounded, their length from 2.00–2.15 in that of the head; pectorals rounded, their length 1.50–1.60 in the same; the upper basal angle vertically beneath the posterior margin of the opercle: caudal forked, the least height of the pedicle 2.25–2.40 in the height of the body. Scales moderate, feebly carinated, and firmly adherent; a patch of small scales on each side of the occipital depression; no triangular scale above the origin of the ventrals: a series of scutes similar to those on the abdominal profile between the occiput and the dorsal; behind that fin the profile of the back is smooth and rounded: abdominal scutes well developed, twenty in front and twelve to fourteen behind the origin of the ventrals. Gill-rakers moderately stout and closely set, their length about one-third of the diameter of the eye.

*Colors*.—Pale straw with a broad silvery median band; each scale above the lateral band with a crescentic series of black dots near the posterior margin; snout similarly dotted. Fins hyaline.

*Type*.—In the Australian Museum. Reg. No. I. 3034.

The species above described inhabits the rivers flowing into Port Jackson and Botany Bay; it has been known to the writer for some time, but as has probably been the case with previous investigators of our Fish-fauna, it was set aside without examination, under the belief that it was merely the young of the widely distributed *C. novæ-hollandiæ*: having, however, had occasion of late to examine more closely our New South Wales Clupeids, the present species attracted a more careful investigation with the gratifying result given above.

*C. sprattellides* is occasionally brought to market in considerable numbers among the prawns (*Penæus macleayi*) from the Parramatta, George's, and Cook's Rivers.

The type specimens described above measure from two and two-thirds to three and a half inches, the latter being apparently the full size to which the species attains. No signs of spawning could be observed in the example dissected.

The position of the ventral fins in *C. sprattellides* being apparently anomalous in the genus *Clupea*, and the fact that this character is associated with a well developed dorsal scutation

forces upon us the consideration whether these characters, taken separately or in conjunction, should not entitle this and similar forms to generic rank. The latter character, however, that is the acute spiniferous ridge between the occiput and the dorsal fin, is common to all the fresh-water and estuary non-migratory Herrings of the cismontane rivers of the Colony, between the limits of the Richmond River and Botany Bay, which the author has had an opportunity of examining: the former character, that of the position of the ventral fin, has been extensively used by systematists as one on which to base a separate genus. This is not the place to discuss the importance or otherwise of this character, but it is worthy of notice that in our common fresh-water herring (*Clupea novæ-hollandiæ*, Cuv. & Val. = *C. richmondia*, Maccl. = (?) *C. vittata*, Casteln.) the ventral fins are inserted immediately below the origin of the dorsal.

With regard to the dorsal serrature, we appeal to our fellow-workers in other countries to examine more carefully the anadromous herrings of their rivers and estuaries, for should it prove to be the case that all the fresh-water herrings have this characteristic, they are clearly separable from the typical *Clupea*.

All species, therefore, in which the occipito-dorsal serrature is present, might be separated therefrom under the name of *Hyperlophus*, and distinguished from *Clupea* by this character.

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## ON THE STRUCTURE AND AFFINITIES OF *PANDA* *ATOMATA*, Gray.\*

By C. HEDLEY, F.L.S.

[Plates IV. V. VI.]

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SOME uncertainty appears to prevail regarding the position which *Bulimus atomatus*, Gray, should occupy. The latest volume of the "Monographia Heliceorum Viventium" includes it in a section embracing another Australian and a dozen South American species, an arrangement which must surely violate natural

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\*Since this essay was written I learn that, by an odd coincidence, both Mr. Pilsbry and myself independently arrived at the conclusion that *atomata* should correctly be referred to *Panda*, and published our opinions simultaneously in America and Australia, in "The Nautilus," Vol. VI., No. 1, p. 9, May, 1892; and in the "Abstract" of the Proceedings of the Linn. Soc. N.S.W., April, 1892, respectively.